

Proceedings of the Iowa Academy of Science

Volume 72 | Annual Issue

Article 3

1965

Table of Contents

Copyright © Copyright 1965 by the Iowa Academy of Science, Inc.

Follow this and additional works at: <http://scholarworks.uni.edu/pias>

Recommended Citation

(1965) "Table of Contents," *Proceedings of the Iowa Academy of Science*: Vol. 72: No. 1 , Article 3.

Available at: <http://scholarworks.uni.edu/pias/vol72/iss1/3>

This Front Matter is brought to you for free and open access by UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Table of Contents

Officers, Iowa Academy of Science.....	10
--	----

REPORTS

The Librarian.....	11
Membership Committee.....	11
High School Relations Committee.....	15
Committee on Science Talent Search.....	17
Iowa Visiting Science Program 1964-65.....	18
Conservation in Iowa, 1964.....	20

IN MEMORIAM

Alison Aitchison.....	31
Emmett J. Cable.....	32
J. Harold Ennis.....	32
Myron Earle Graber.....	33
George William Heitkamp.....	34
James M. Vine.....	35
Roscoe W. Woods.....	35

BOTANY

Phase Contrast and Electron Microscopic Studies of Nuclei of Myxomycete Plasmodia. SISTER MARY ANNUNCIATA McMANUS AND KAREN BEALL	36
Phase Contrast and Electron Microscopic Observations on Membranous Organelles in Myxomycete Plasmodia. SISTER MARY ANNUNCIATA McMANUS AND LINDA RUCH.....	39
A Preliminary List of the Lichens of Dickinson and Emmet Counties, Iowa. KAREN K. JUHL AND LOIS H. TIFFANY..	43
Notes on Fleshy Fungi in Iowa. III. VIRGIL K. HOWE, MICHAEL D. WOODWARD, LOIS H. TIFFANY AND HAROLD S. McNABB, JR.....	44
Inhibitions of Mycelial Growth of <i>Pythium graminicolum</i> by Soil Fungi. GEORGE KNAPHUS.....	46
Microbiological Studies on the Vitamin B6 Antagonist Found in Flaxseed. JOHN L. TJOSTEM.....	50
Preliminary Survey of the Algae of Lake Ahquabi. DONALD G. DELISLE, DENNIS H. TAKATTASHI AND STEVE W. WEBER.....	61
Changes in the Aquatic Vascular Flora of Lake East Okoboji in Historic Times. ROGER VOLKER AND S. GALEN SMITH.....	64
Recent Pollen Deposition in Miller's Bay, Lake Okoboji, Iowa. RUTH WEBSTER AND JOHN D. DODD.....	72
The Postglacial Phytogeography of the Iowa Lobe. L. J. EILERS.....	83

Distribution Patterns of Eastern Red-Cedar <i>Juniperus virginiana</i> L. in Henry County, Iowa. DELORES IRMA GRAF, ROGER Q. LANDERS AND R. WILLIAM POULTER . . .	97
Fossiliferous Plants of the Pennsylvanian Period from a Selected Area in Macon County, Missouri. DONALD F. SPAIN	105

CHEMISTRY

Identification of a Carboxyl group at the Active Site of a Barley Malt Phosphatase. D. J. GRAVES, INSTRUCTOR	112
Determination of Perchlorate Ion with Tetra-Phenylarsonium Chloride. JOHN E. GOING AND RONALD T. PFLAUM	116
Pyridine Thioamides as Analytical Reagents for Iron. RONALD T. PFLAUM, GERALD F. BRUNZIE AND LAWRENCE E. COOK	122
A Conductometric Study of The Influence of Concentration and Temperature on the Reaction Velocity of 2, 4-Dinitrochlorobenzene with piperidine in 95 percent Ethanol. F. E. JACOB AND CHARLES O. FRANK	131
Trace Analysis of Halogens by Neutron Activation. RALPH O. ALLEN JR.	138
Formation Constants of Copper (II) Compounds of Pyridylalpyridylhydrazine. L. KEITH AND HARVEY DIEHL	144
Can Chromatography Occur in Nature? PAUL J. KEMP AND HARVEY DIEHL	149
The Pyrite and Marcasite Electrodes. DAVID L. PRINGLE AND HARVEY DIEHL	160
Comparison Between Some Simple Computer-Calculated and Experimental Ion Exchange Elutions. EDWARD H. WARD, LARRY G. McRAE AND RUSSELL W. MAATMAN	168

CONSERVATION

Tree Succession in Pine Hollow State Forest and Its Implications. EDWARD T. CAWLEY	179
Pheasant Farms in Iowa. DAVID J. ROSLIEN AND ARNOLD O. HAUGEN	186
Specific Antibodies for <i>Mycoplasma</i> in Pheasants on Game Farms in Iowa. STEVEN PALMER AND DAVID J. ROSLIEN . .	196
Vertebrate Coactions With the Franklin Ground Squirrel. EMMETT POLDER	201
Status and Management of the White-tailed Deer in Iowa, 1954-1962. PAUL D. KLINE	206

Spring Wood Duck Population of Mississippi River Pool 10. DALE HEIN	217
Comparative Growth of Four Species of Fish in Three Different Types of Iowa Artificial Lakes. JAMES MAYHEW	223
Fish Population in Five Missouri River Ox-bow Lakes. BILL D. WELKER	229
Some Chemical Characteristics of Iowa Lakes and Reservoirs. ROGER W. BACHMANN	237
Factors Affecting Winter Fish Kills in the Coralville Reservoir, Iowa. DONALD B. McDONALD AND ROBERT D. SCHMICKLE	242
Comparative Age and Growth of Channel Catfish From Some Eastern Iowa Rivers. ROGER SCHOUMACHER AND GARY ACKERMAN	247
Spawning Periodicity of the River Carpsucker, <i>Carpodacus</i> <i>carpio</i> . DAVID BEHMER	252
Movement and Homing of Sunfishes in Clear Lake. JOEL J. KUDRNA	263
Life History of the Northern Common Shiner <i>Notropis</i> <i>cornutus frontalis</i> , in Boone County, Iowa EVERETT FEE	272
Life History and Ecology of Western Blacknose Dace, Boone County, Iowa, 1963-1964. RICHARD NOBLE	282

GEOLOGY

Conodonts from the Aplington Formation of Northcentral Iowa. W. I. ANDERSON	293
River Terraces of the Middle Humber River, Ontario. MICHAEL C. ROBERTS	298
The Glenwood-Platteville Disconformity. E. CHARLES GULDENZOPF	305
Geologic Interpretation of Magnetic Map, Keokuk County, Iowa D. H. HASE	311
Detailed Mapping of the Bedrock Configuration in Des Moines County, Iowa, With an Electrical Resistivity Instrument. LYLE V. A. SENLEIN	316
The Effects of the Alaskan Earthquake of March 27, 1964, on Ground Water in Iowa. RONALD W. COBLE	323
A Study of the Structure and Associated Features of Sheep Mountain Anticline Big Horn County, Wyoming. GARY D. JOHNSON, LARRY J. GARSIDE AND ALBERT J. WARNER	332
Lithologic Control of Alkali-Induced Expansion in Carbonate Rock From Decorah, Iowa. JAMES H. ELWELL AND JOHN LEMISH	343

Determining the Relative Shear Behavior of Coarse Concrete Aggregate and Associated Matrix. PAUL J. KEMP AND JAMES H. ELWELL.....	351
---	-----

PSYCHOLOGY

The Effect of Family Size, Sex of Siblings and Ordinal Position on Personality Characteristics. BRIAN KRUGER AND W. G. FRUEHLING.....	357
Psychological Scaling of Language Development of Children. DOROTHY SHERMAN, THOMAS SHRINER AND FRANKLIN SILVERMAN.....	366
Paired-Associates Learning of Random Shapes and Concrete Nouns of Two Levels of Descriptive Appropriateness. SISTER MARY J. C. CATHERINE LEONARD AND DON LEWIS.....	372
Assessing the Connotative Strengths of Random Shapes. DON LEWIS AND JOANNA B. BOEHNERT.....	378
Value Patterns in Three Midwest Colleges. JOHN R. TISDALE.....	389
Sequential Effects of Contingent and Non-Contingent Punishment. D. R. BROWN AND N. D. KENT.....	395

SCIENCE TEACHING

A Study of the Change in Intelligence Distribution. WILLIAM H. DREIER AND BEVERLY S. YOUNG.....	399
The Development of Critical Thinking Through Science Instruction. GERALD H. KROCKOVER.....	401
New Directions in Earth Science in Iowa Schools. SILAS W. SCHIRNER.....	403

ZOOLOGY

Experimental Studies on the Dispersal of the Frog, <i>Rana Pipiens</i> . RICHARD V. BOVBJERG.....	411
Larval Development of Four Caryophyllaeid Cestodes. ROBERT L. CALENTINE.....	417
The Histological Effects of Tapazole on Rat Thyroids, Hearts, and Adrenals. WADE L. COLLIER.....	424
A Pilot Study of the Thymus of Propylthiouracil-Treated Rats. MAYBELLE G. CONKLIN.....	431
Caryophyllaeid Cestodes from Two Species of Redhorse (<i>Moxostoma</i>). LEIGH H. FREDRICKSON AND MARTIN J. ULMER.....	443
The Influence of the Antithyroid Drug, Tapazole on Reproduction in Rats. DANIEL T. GEITTMANN.....	461
Sexual Dimorphism in the Dorsal Fins of <i>Ollentodon</i> and <i>Skiffia</i> , Mexican Goodeid Teleosts. GUILLERMO MENDOZA.....	468

The Antagonistic Effect of Strontium Ions for Anesthetization of <i>Paramecium caudatum</i> with Nickel Ions. CLAIR G. RAUSCH.....	476
An Analysis of Abnormal Development in the Cnbw-16 Stock of <i>Drosophila melanogaster</i> . PHILLIP J. REITAN...	485
The Course of Columbiform <i>Plasmodium Relictum</i> Infections in Canaries. B. T. RIDGEWAY AND JOHN N. FARMER.....	493
Radioisotope Distribution in Visceral Organs of White Mice. LESTER C. SHELL, DENZIL J. HAWES-DAVIS, SAM MCCLUGAGE AND STEVE LIVESEY.....	501
Effects of Estradiol Hormone on the Maturation of the Gonads and Associated Duct System of the Fish <i>Lebistes reticulatus</i> . MICHAEL THOMAS STORY.....	505
The Effects of Isometric Contractions on Breathing and Pulse Rates in the Performance of a Modified Harvard Step Test. WALLACE A. SWAN AND KENNETH M. COOK.....	517
<i>Sarcocystis</i> Infections in Relation to Age of Iowa Cottontails (Protozoa: Sarcocystidae.) FREDERICK J. VANDE VUSSE.....	523
Optic Nerve Size in Blind and Normal Mice. MARGARET L. WATSON, JEAN E. MCKINNIE AND DONALD M. EVANS.....	528
Chromosomes of the Laboratory Mouse. MARGARET L. WATSON AND JERRY D. OLIVER.....	536
A Quantitative Study of the DNA and RNA in the Liver of Albino Mice During the Estrus Cycle. ALLAN F. WOLFE.....	539